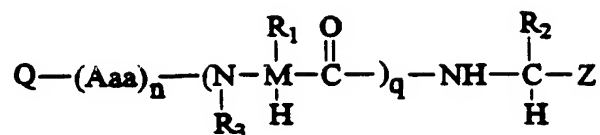


What is claimed is:

1. A compound having the Formula I:



I

5 wherein:

Q has the formula $\text{G}-\text{B}-(\text{CHR}^4)_v$, where R^4 is independently H or alkyl having from 1 to 4 carbons;

v is 0, 1, or 2;

B is selected from the group consisting of $\text{C}(=\text{O})$,
 10 $\text{OC}(=\text{O})$, $\text{S}(=\text{O})_m$, CH_2 , a bond, $\text{NR}^5\text{C}(=\text{O})$, $\text{S}(=\text{O})_m-\text{A}-\text{C}(=\text{O})$, and
 $\text{C}(=\text{O})-\text{A}-\text{C}(=\text{O})$, where R^5 is H or lower alkyl;

m is 0, 1, or 2;

A is lower alkylene or cycloalkylene,
 optionally substituted with one or more halogen atoms,
 15 aryl, or heteroaryl groups;

M is a carbon atom;

G is selected from the group consisting of H, a
 blocking group, lower alkyl, lower alkenyl, aryl having
 from about 6 to about 14 carbons, heterocyclyl having from
 20 about 5 to about 14 ring atoms, heterocycloalkyl having
 from about 5 to about 14 ring atoms, arylalkyl having from
 about 7 to about 15 carbons, heteroarylalkyl, and
 arylheteroalkyl wherein the aryl portion can be unfused or
 fused with the heteroalkyl ring, said alkyl, aryl,
 25 heterocyclyl, heterocycloalkyl, arylalkyl, heteroarylalkyl,
 and arylheteroalkyl groups being optionally substituted
 with one or more J groups;

J is selected from the group consisting of halogen,
 CN, nitro, lower alkyl, cycloalkyl, heterocycloalkyl,
 30 heteroalkyl, halogenated alkyl, aryloxyalkyl, alkylthio,
 alkylsulfonyl, aryl, heteroaryl, arylalkyl, arylalkyloxy,

arylsulfonyl, heteroarylsulfonyl, alkoxycarbonyl, alkoxyalkyl, acyl, alkoxy, hydroxy, carboxy, hydroxyalkyl, amino, alkylamino, and aminoalkyl, said amino group or said amino group of said aminoalkyl or alkylamino group being
5 optionally substituted with an acyl group, an alkoxy group, or with 1 to 3 aryl, lower alkyl, cycloalkyl, or alkoxyalkyl groups; and said aryl, heteroaryl, heterocycloalkyl, and heteroalkyl groups being further optionally substituted by a J group;

10 each Aaa is independently an amino acid which optionally contains one or more blocking groups;

n is 0, 1, 2, or 3;

R¹ and R² are independently selected from the group consisting of H, alkyl having from one to about 6 carbons,
15 arylalkyl having from about 7 to about 15 carbons, heteroalkyl in which the ring contains from about 5 to about 14 ring atoms, heteroarylalkyl in which the heteroaryl ring contains from about 5 to about 14 ring atoms, alkoxyalkyl, a side chain of a naturally occurring
20 amino acid in the R or S configuration, and (CH₂)_pNH-L, said alkyl, arylalkyl, heteroalkyl, heteroarylalkyl, and alkoxyalkyl groups being optionally substituted with one or more J groups;

p is 0, 1, 2, or 3;

25 L is selected from the group consisting of alkoxycarbonyl having from 2 to about 7 carbons, arylalkoxycarbonyl in which the arylalkoxy group contains about 7 to about 15 carbons, and S(=O)₂R⁶;

R⁶ is selected from the group consisting of
30 lower alkyl, and aryl having from about 6 to about 14 carbons;

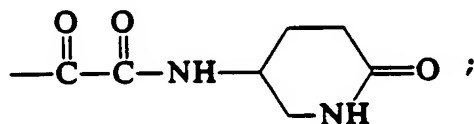
R³ is selected from the group consisting of H, alkyl having from one to about 6 carbons, arylalkyl having from about 7 to about 15 carbons, heteroalkyl in which the ring
35 contains from about 5 to about 14 ring atoms,

heteroarylalkyl in which the heteroaryl ring contains from about 5 to about 14 ring atoms, alkoxyalkyl, a side chain of a naturally occurring amino acid in the R or S configuration, $(CH_2)_pNH-L$, $C(=O)R^7$, $S(=O)_2R^7$, a blocking group, and when combined with the carbon atom to which R^1 is attached an alkylene group having from 2 to 5 carbons, said alkylene group being optionally substituted with a group selected from the group consisting of aryl, azide, CN, a protected amino group, and OSO_2 -aryl, said alkyl, arylalkyl, heteroalkyl, heteroarylalkyl, and alkoxyalkyl groups being optionally substituted with one or more J groups;

R⁷ is selected from the group consisting of aryl having from about 6 to about 14 carbons, heteroaryl having from about 5 to about 14 ring atoms, arylalkyl having from about 7 to about 15 carbons, alkyl having from 1 to about 10 carbons, said aryl, heteroaryl, arylalkyl and alkyl groups being optionally substituted with one or more J groups, heteroalkyl having from 2 to about 7 carbons, alkoxy having from about 1 to about 10 carbons, and amino optionally substituted with 1 or more alkyl groups;

q is 0 or 1;

Z is selected from the group consisting of
 $C(=O)C(=O)NH-X-A^1-K$ and



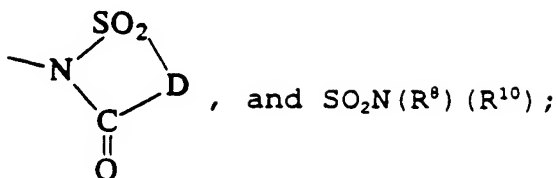
25

X is a bond or -O-;

A^1 is the same as A ;

K is selected from the group consisting of

$$N(R^{10})Y,$$



D is a fused aryl or heteroaryl group;

R^{11} is selected from the group consisting of alkoxy, aryloxy, and NHR^{12} ;

5 R^{12} is selected from the group consisting of H, alkyl, aryl, and heteroaryl, said alkyl, aryl or heteroaryl groups being optionally substituted with one or more J groups;

Y is selected from the group consisting of SO_2R^3 ,
 10 $\text{C}(=\text{O})\text{NHR}^9$, $\text{C}(=\text{S})\text{NHR}^9$, $\text{C}(=\text{NCN})\text{R}^{11}$, $\text{C}(=\text{NC}(=\text{O})\text{NHR}^{10})\text{R}^{11}$, and CO_2R^8 ;

R^8 is selected from the group consisting of alkyl, alkoxy, aryl, and heterocyclyl, said alkyl, alkoxy, aryl, or heterocyclyl groups being optionally substituted
 15 with one or more J groups;

R^9 is selected from the group consisting of H, alkyl, aryl, and heteroaryl, said alkyl, aryl, or heteroaryl groups being optionally substituted with one or more J groups;

20 or an R^9 alkyl group may be combined with an A^1 alkylene group to form a N-containing heterocyclic 5- or 6-membered ring;

R^{10} is selected from the group consisting of H and lower alkyl;

25 or in the moiety $\text{SO}_2\text{N}(\text{R}^8)\text{R}^{10}$, R^8 and R^{10} may be combined together with the N atom to which they are attached to form a N-containing heterocyclic 5- or 6-membered ring;

or where A^1 is an alkylene group, and K is $\text{N}(\text{R}^{10})\text{Y}$
 30 wherein R^{10} is alkyl, said R^{10} alkyl group may be combined with said A^1 alkylene group to form a N-containing heterocyclic 5- or 6- membered ring;

or a pharmaceutically acceptable salt thereof.

2. The compound of claim 1 wherein n and v are each 0, q is 1, B is a bond, and G is H.

3. The compound of claim 1 wherein R¹ is the
5 sidechain of a naturally occurring amino acid.

4. The compound of claim 1 wherein R³ is
-S(=O)₂R⁷.

5. The compound of claim 1 wherein R² is benzyl or
alkoxyalkyl.

10 6. The compound of claim 1 wherein X is a bond, and
Y is SO₂R⁸.

7. The compound of claim 1 wherein A¹ is
-CH₂-CH₂-, -CH₂-CH(CH₃)-, or -(CH₃)CH-CH₂-.

8. The compound of claim 1 wherein R¹ is a serine
15 sidechain, which is optionally capped with a benzyl group.

9. The compound of claim 8 wherein M is a carbon
atom in the D configuration.

10. The compound of claim 1 wherein R² is benzyl, R⁷
20 is methyl, and R⁸ is substituted phenyl, unsubstituted
phenyl, substituted heteroaryl, or unsubstituted
heteroaryl.

11. The compound of claim 1 wherein R⁸ is aryl, aryl
substituted with amino, aryl substituted with
25 heterocyclomethyl, heteroaryl, alkyl substituted with
heteroaryl, or heteroaryl substituted with alkylthio,

haloalkyl, alkyl, phenylsulfonyl, halogen, aminophenyl, amino, or dialkylaminoalkyl.

12. The compound of claim 1 wherein n and v are each 0, q is 1, R¹ is the side chain of an amino acid in the D- or L-configuration, R³ is S(=O)₂R⁷, G is H, B is a bond, R² is benzyl or alkoxyalkyl, X is a bond, and Y is SO₂R⁸.

13. The compound of claim 1 wherein A¹ is CH₂CH₂, CH₂CH(CH₃), or (CH₃)CHCH₂.

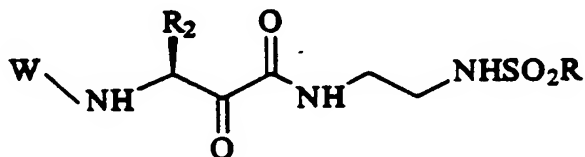
10 14. The compound of claim 1 wherein R¹ is a serine side chain in the D-configuration in which the hydroxyl group is capped with benzyl, R² is benzyl, R⁷ is methyl, and R⁸ is substituted or unsubstituted phenyl or substituted or unsubstituted heteroaryl.

15

15. The compound of claim 1 wherein R₁-R₄, B, G, Aaa, X, A¹, Y, n, q and v are selected in accordance with Tables 2 and 3.

16. The compound of claim 1 wherein R₁-R₄, B, G, Aaa, X, A¹, Y, n, q and v are each independently selected from the group of substituents shown in Tables 2 and 3.

17. The compound of claim 1 having the Formula:

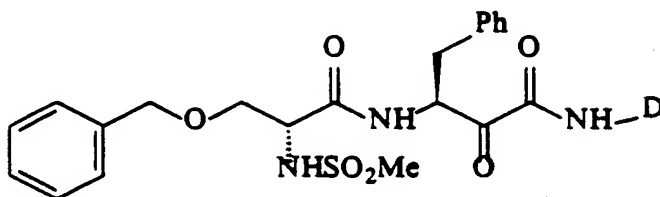


wherein:

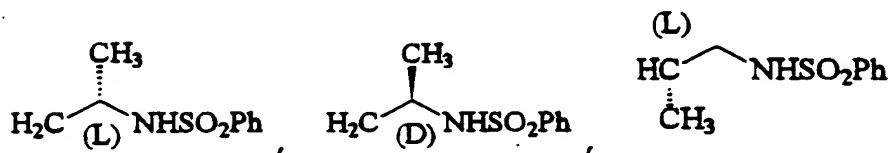
25 W, R₂ and R are independently selected from the group of substituents shown in Table 2.

18. The compound of claim 17 wherein W, R₂ and R are selected in accordance with Table 2.

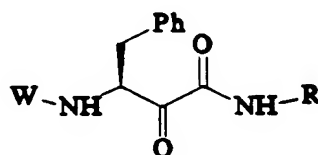
19. The compound of claim 1 having the Formula:



5 wherein D is CH₂CH₂N(CH₃)SO₂Ph or has one of the formulas:



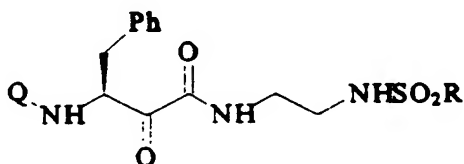
20. The compound of claim 1 having the formula:



wherein W and R are independently selected from the
10 group of substituents shown in Table 4.

21. The compound of claim 20 wherein W and R are selected in accordance with Table 4.

22. The compound of claim 1 having the Formula:



wherein Q and R are independently selected from the group of substituents shown in Table 5.

23. The compound of claim 22 wherein Q and R are selected in accordance with Table 5.

5 24. The compound of claim 1 wherein n, v and q are each 0; B is (C=O); and G is phenyl or lower alkyl, said phenyl or lower alkyl groups being optionally substituted with one or more J groups.

25. A composition for inhibiting a serine protease or
10 a cysteine protease comprising a compound of claim 1 and a pharmaceutically acceptable carrier.

26. A method for inhibiting a serine protease or a
cysteine protease comprising contacting a protease selected
from the group consisting of serine proteases and cysteine
15 proteases with an inhibitory amount of a compound of claim
1.